

# NUECES DELTA INFLOW STRATEGIES

May 1, 2017



Alan  
Plummer  
Assoc.



**GOAL**

**FIND WAYS TO ADD WATER TO THE NUECES DELTA**



# **TEAM**

**FREESE AND NICHOLS**

**ALAN PLUMMER AND ASSOCIATES**

**AMATERRA ENVIRONMENTAL**

**CRESPO CONSULTING**

# **INTERVIEWS**

**K. ALEXANDER**

**R. ALLEN**

**J. DODSON**

**K. DUNTON**

**L. J. FRANCIS**

**R. FREUND**

**B. HODGES**



# **INTERVIEWS**

**P. MONTAÑA**

**B. MOULTON**

**S. RAMOS**

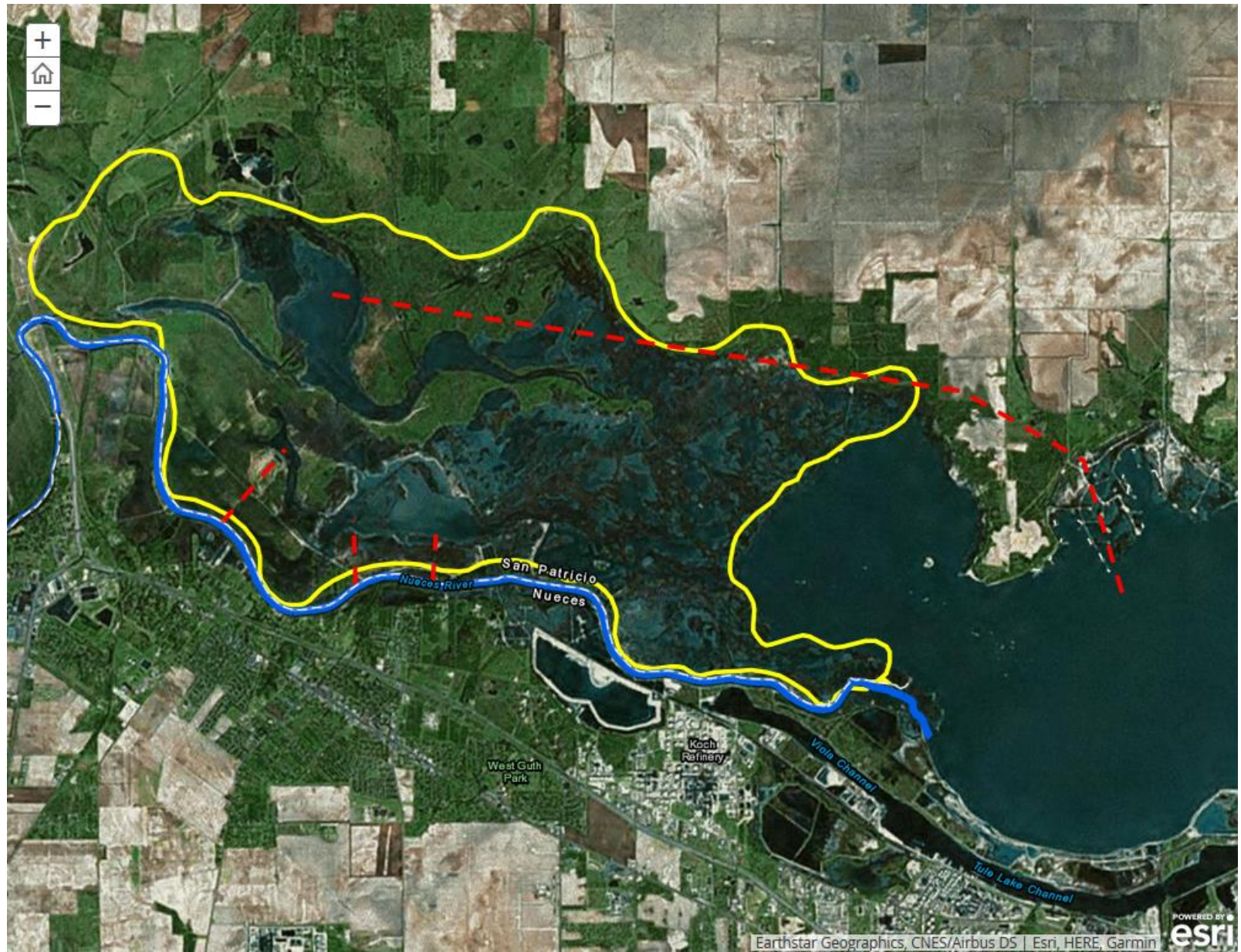
**C. SHOCKLEY**

**T. SMITH**

**J. TUNNELL**

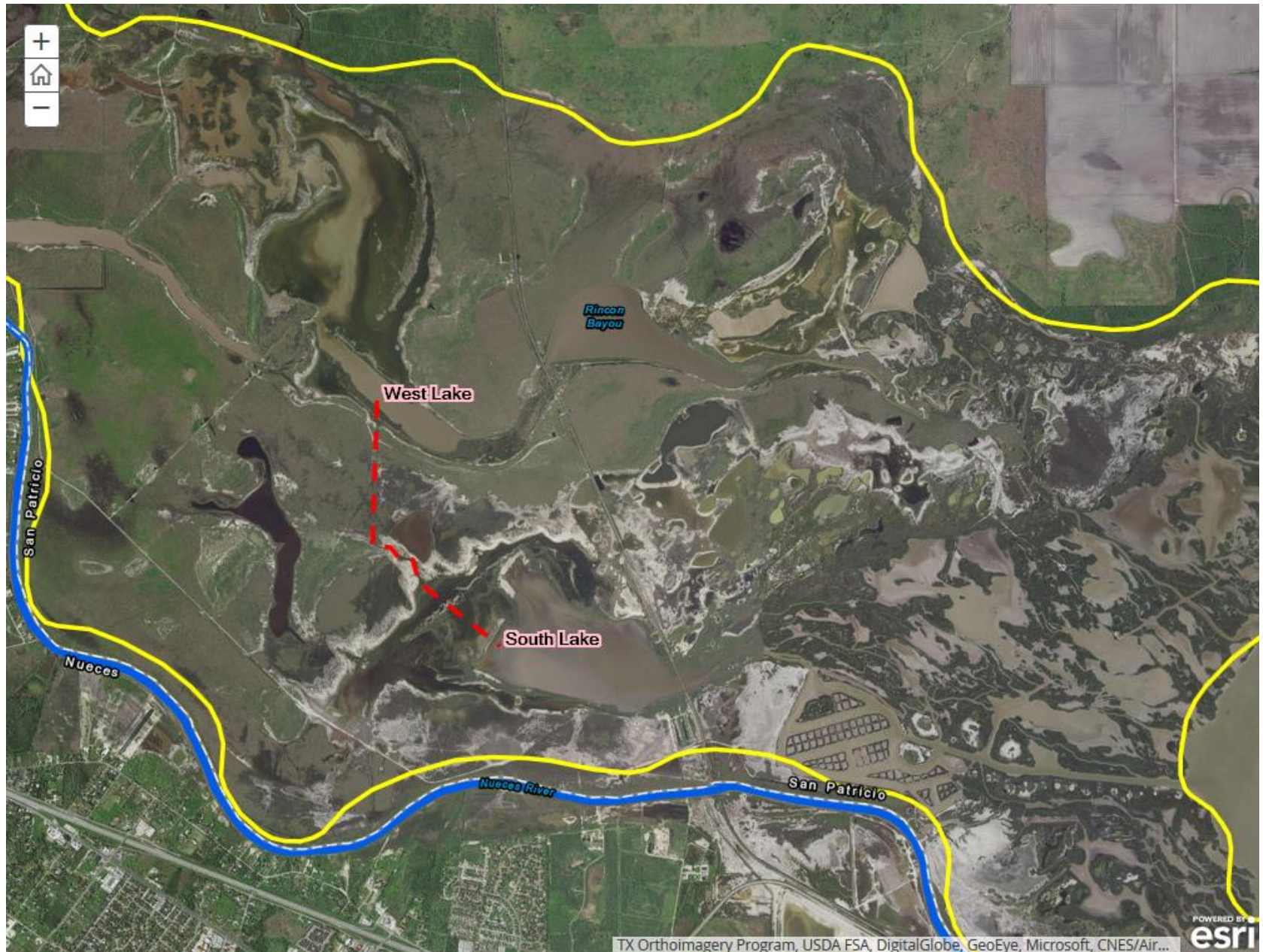
**G. WARD**

# NUECES RIVER TIDAL/NUECES BAY ADDITIONS TO DELTA



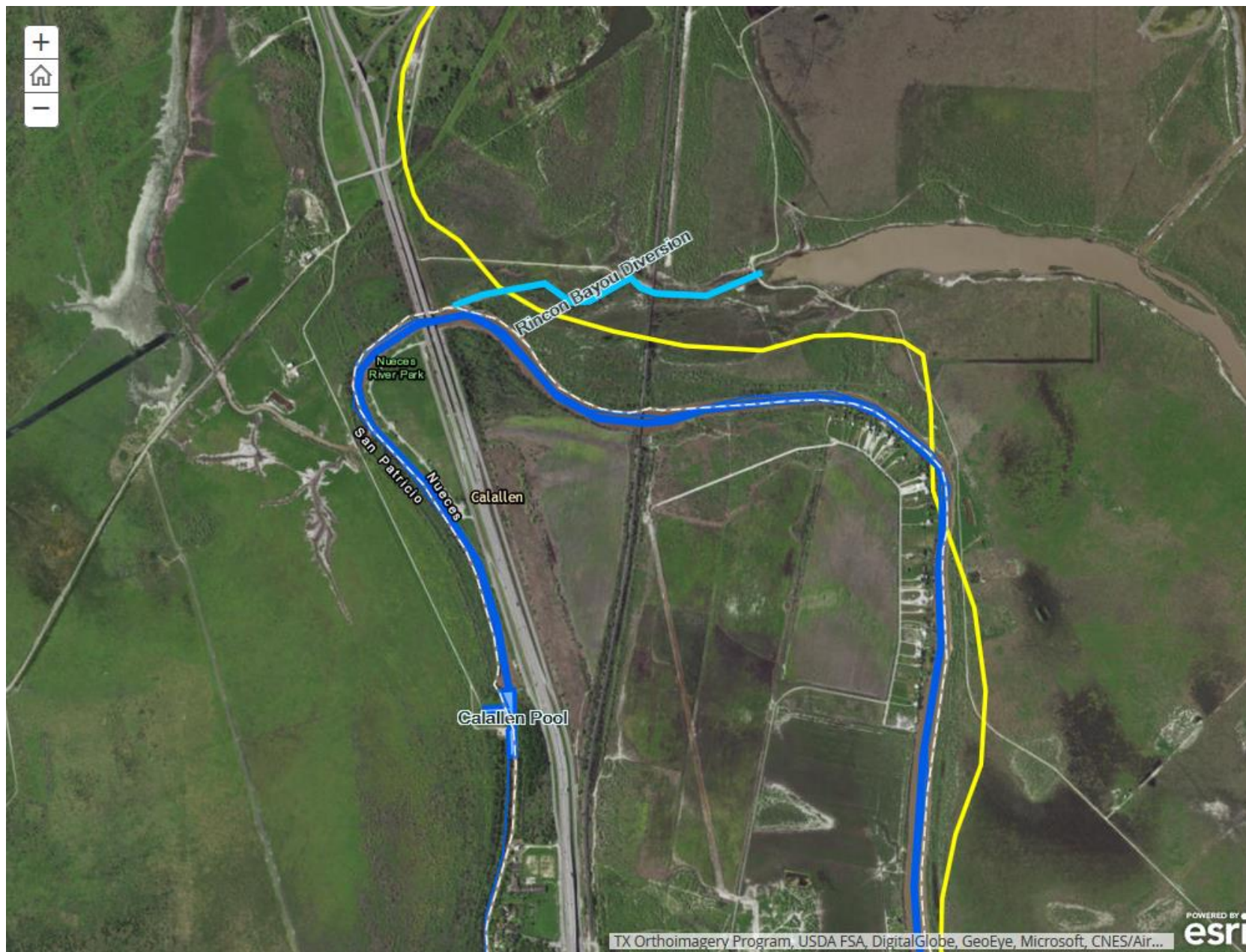


# WEST LAKE TO SOUTH LAKE



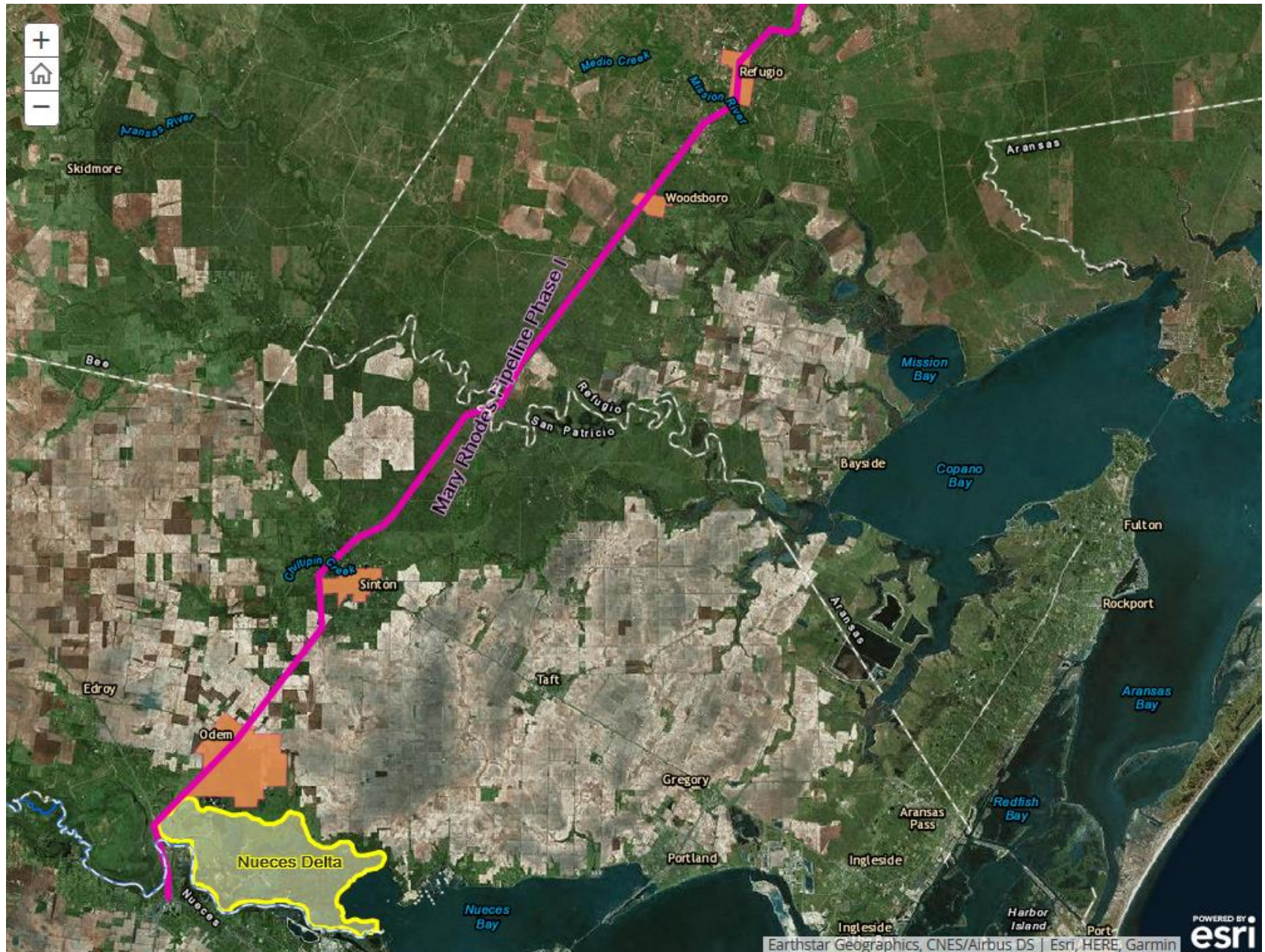


# MODIFY PUMPING REGIME





# MARY RHODES PIPELINE





**Source location**

**Amount**

**Frequency and season**

**Location added**

**Cost to obtain**

**Cost to add**





**Impacts of taking water**

**Impacts of adding water**

**Permits required**

**Time to implement**



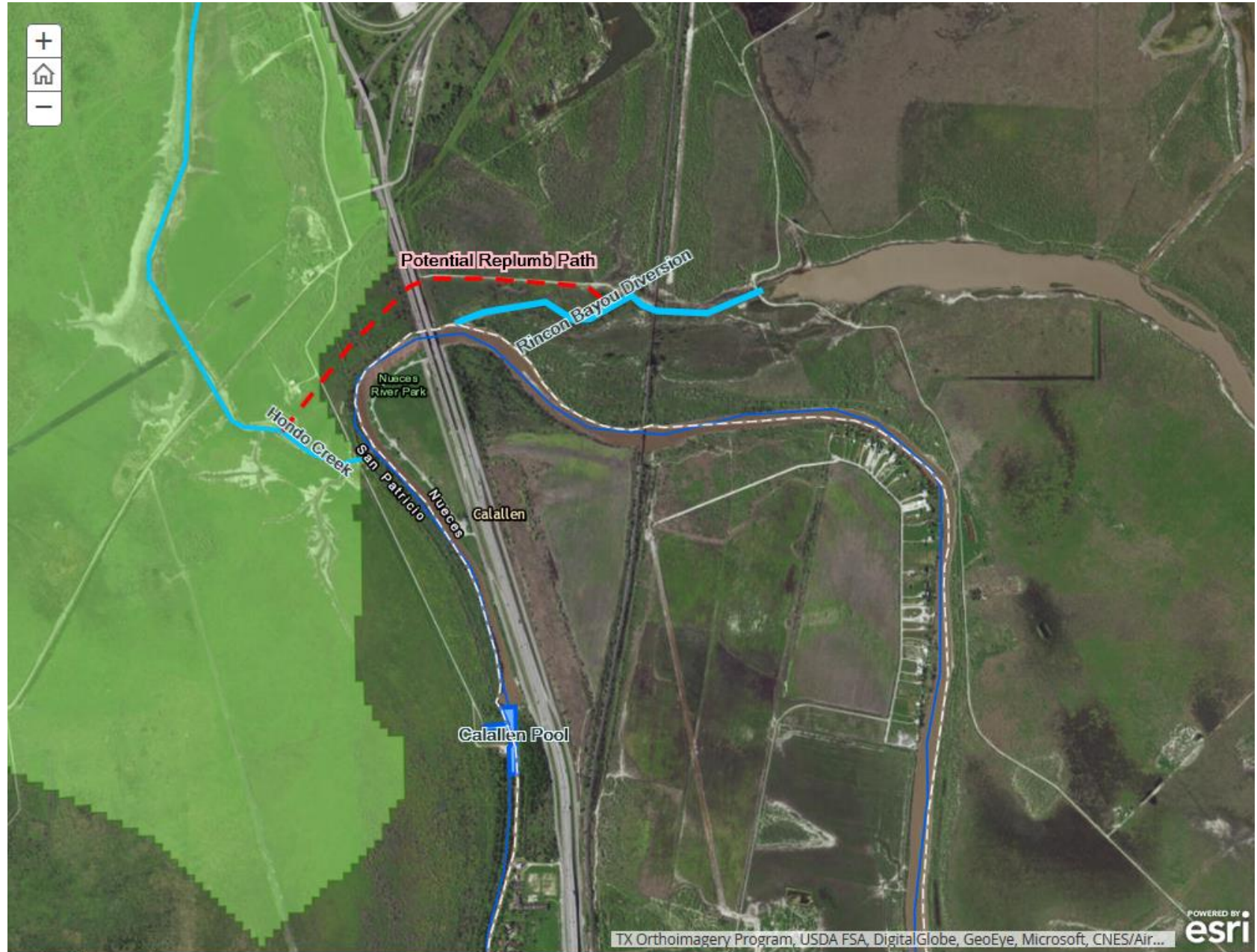
# QUESTIONS



# FOR MAP QUESTIONS:

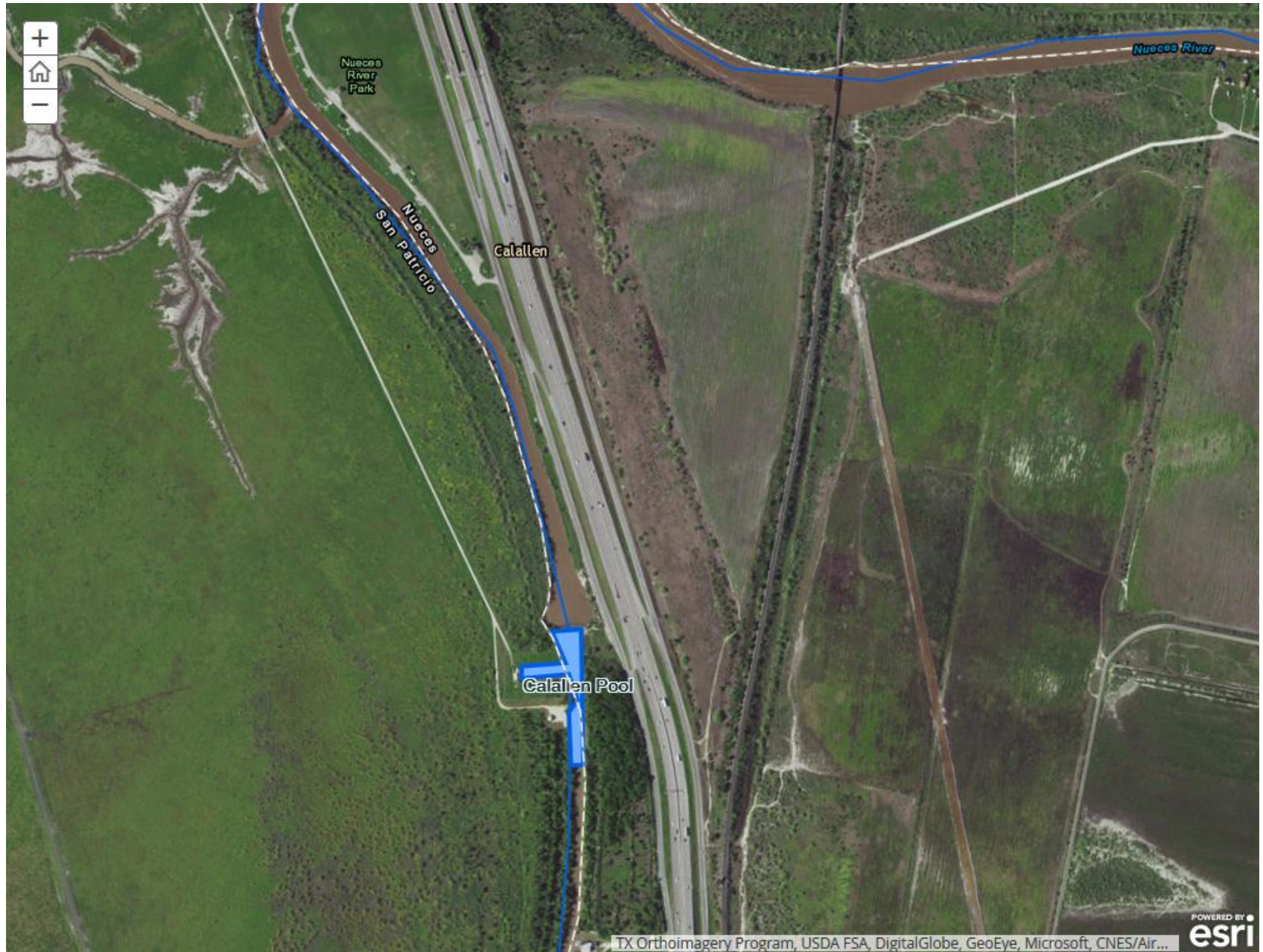
- New interactive map (ESRI story map) for Nueces freshwater inflow strategies created at
- <http://arcg.is/2pjb4zZ>
- All maps are screenshots from the interactive map .
- For map edits and questions please contact: [eto@apaienv.com](mailto:eto@apaienv.com)

# HONDO CREEK REALIGNMENT



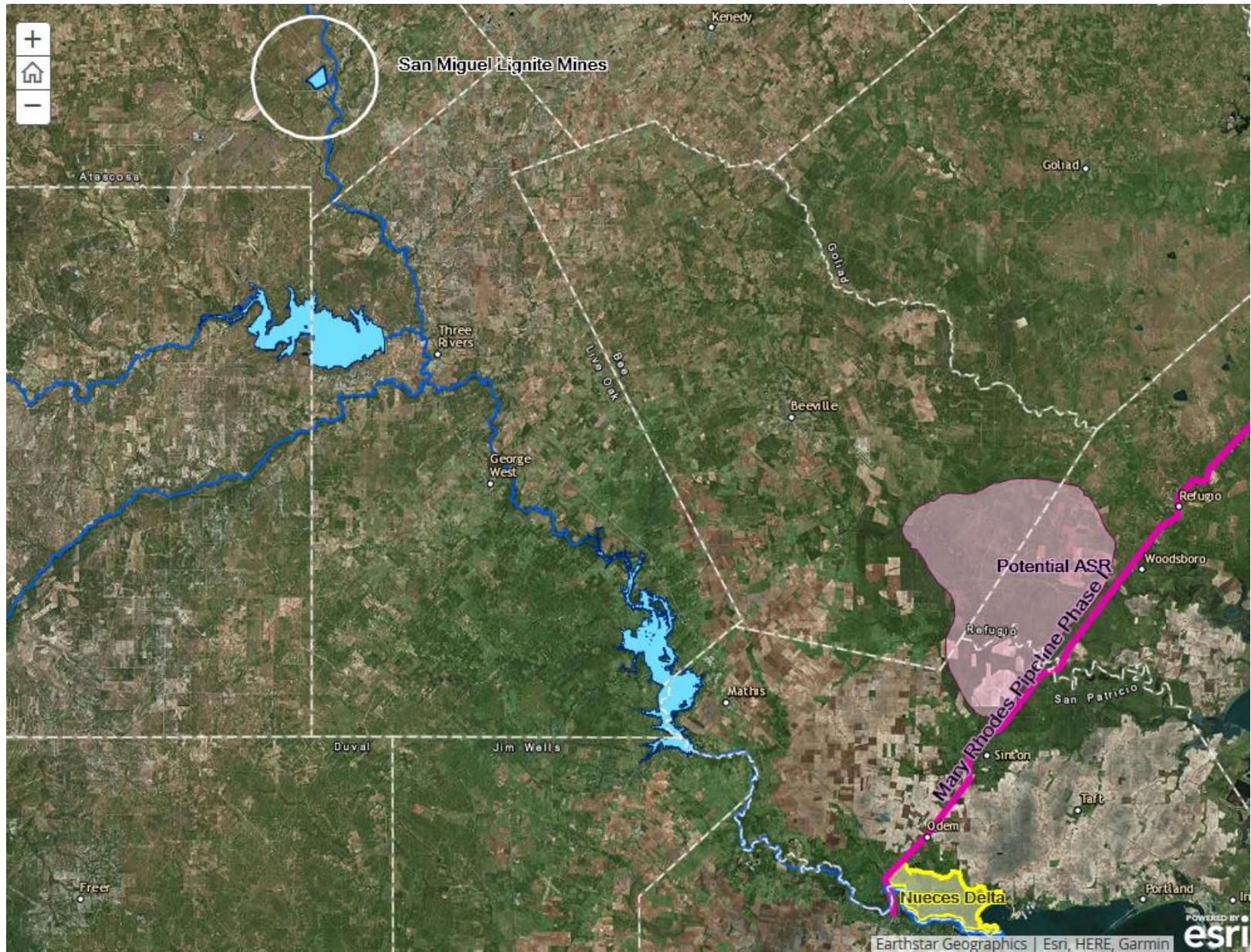


# BRACKISH SEEPAGE ABOVE CALLALLEN DAM



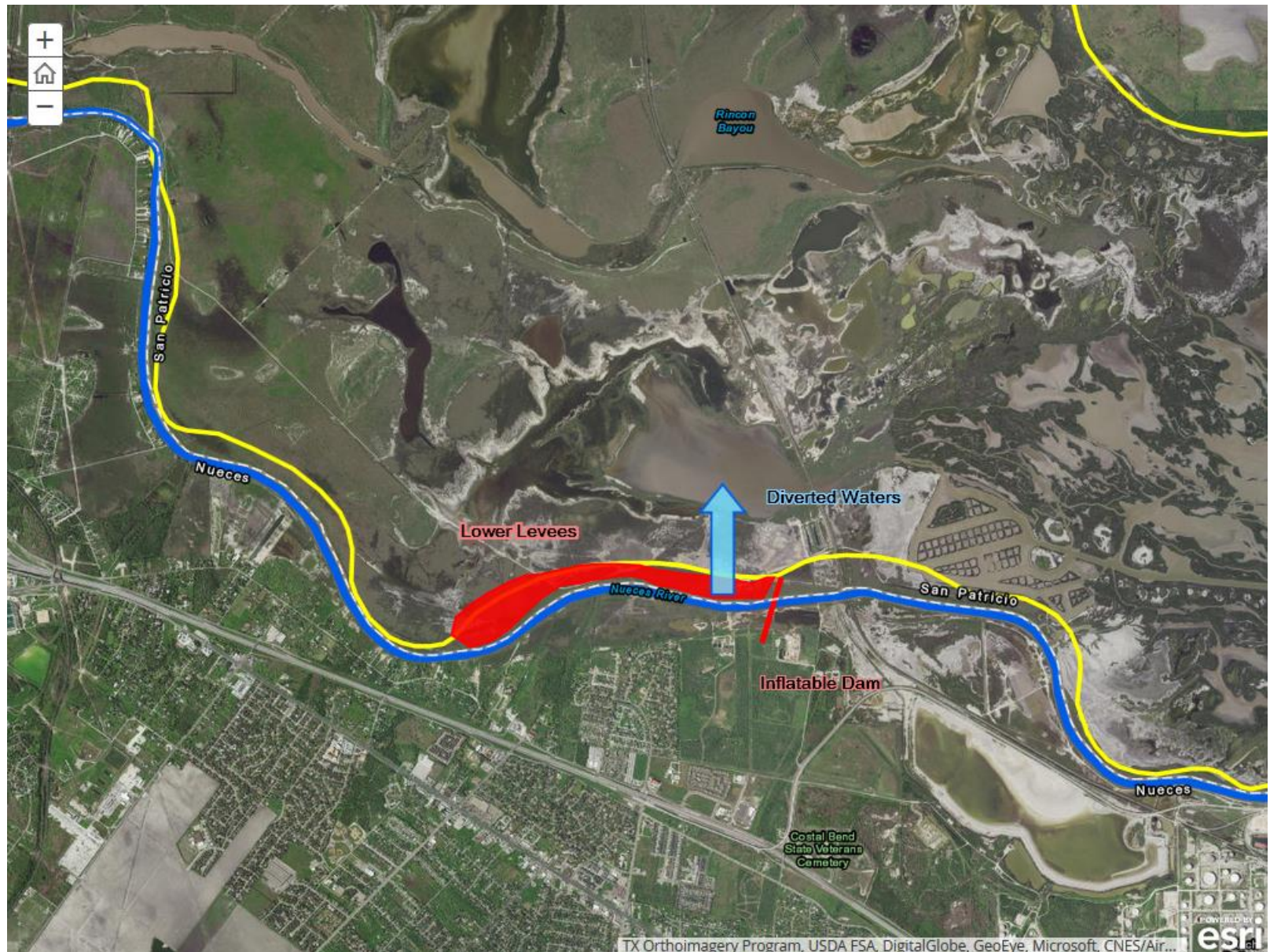


# OFF-CHANNEL RESERVOIR AND/OR AQUIFER STORAGE



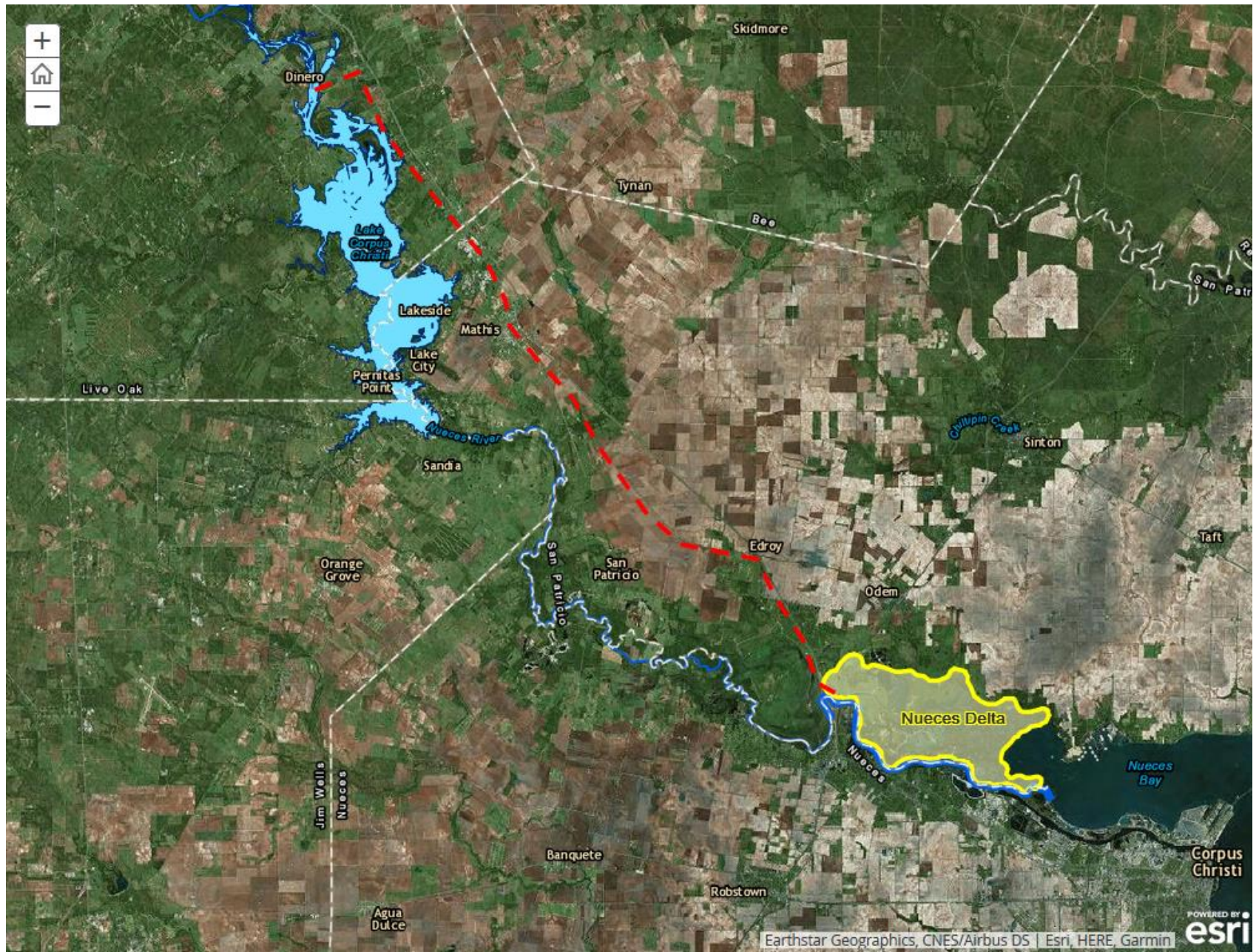


# PLACE INFLATABLE DAMS IN NUECES RIVER TIDAL AND LOWER LEVEES





# CONSERVATION MEASURES



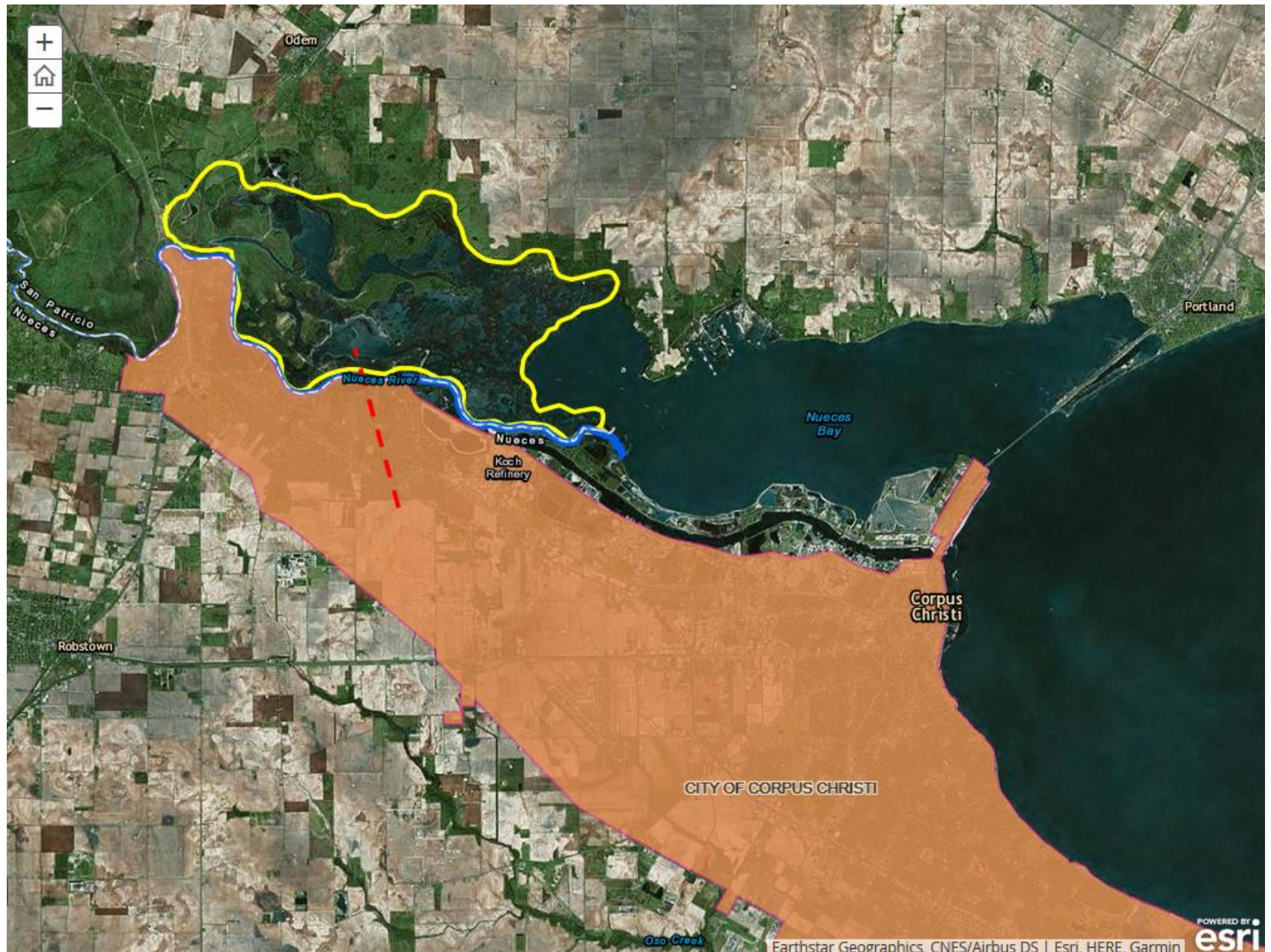


# INDUSTRIAL RETURN FLOWS



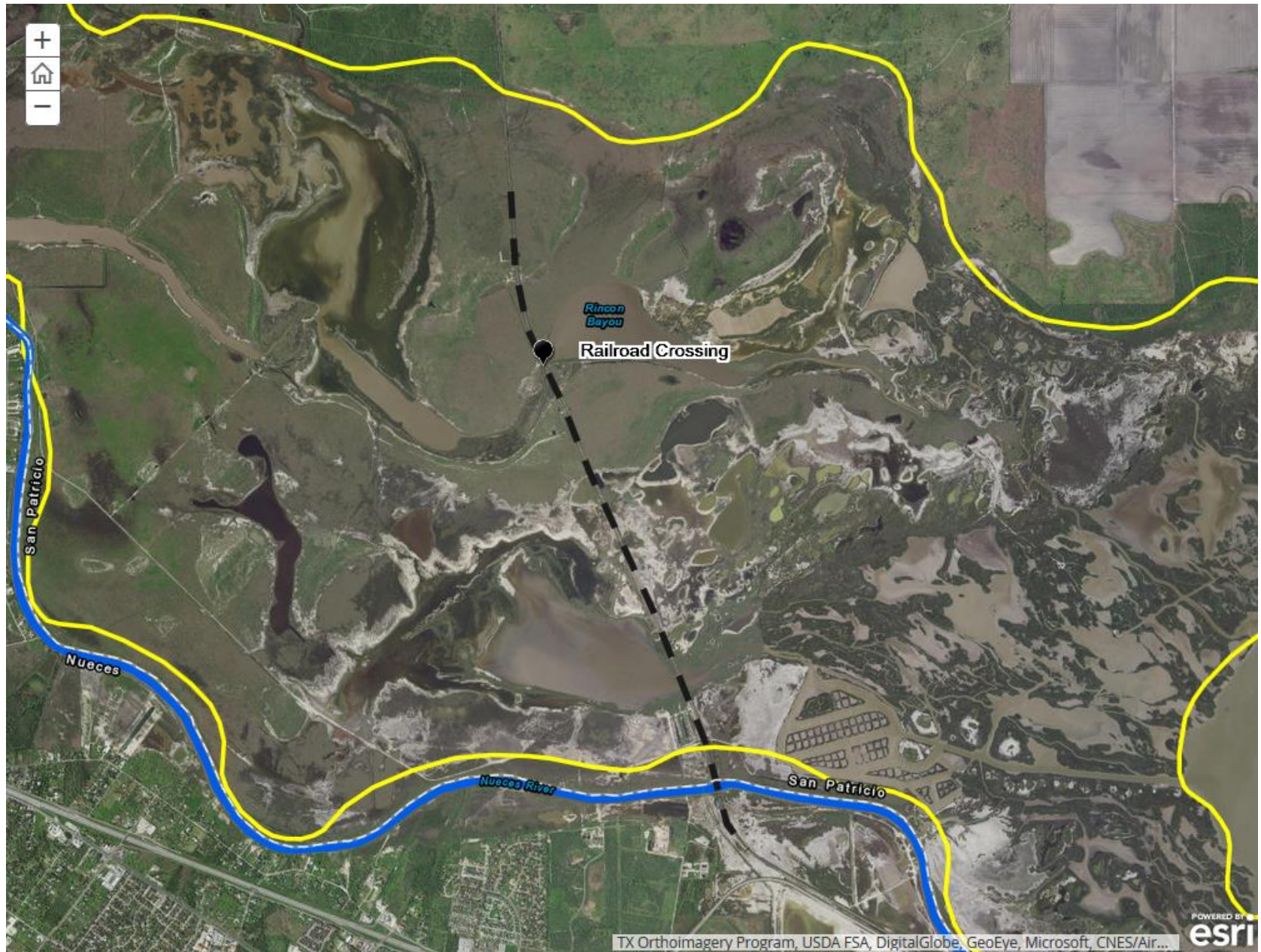


# MUNICIPAL RETURN FLOWS



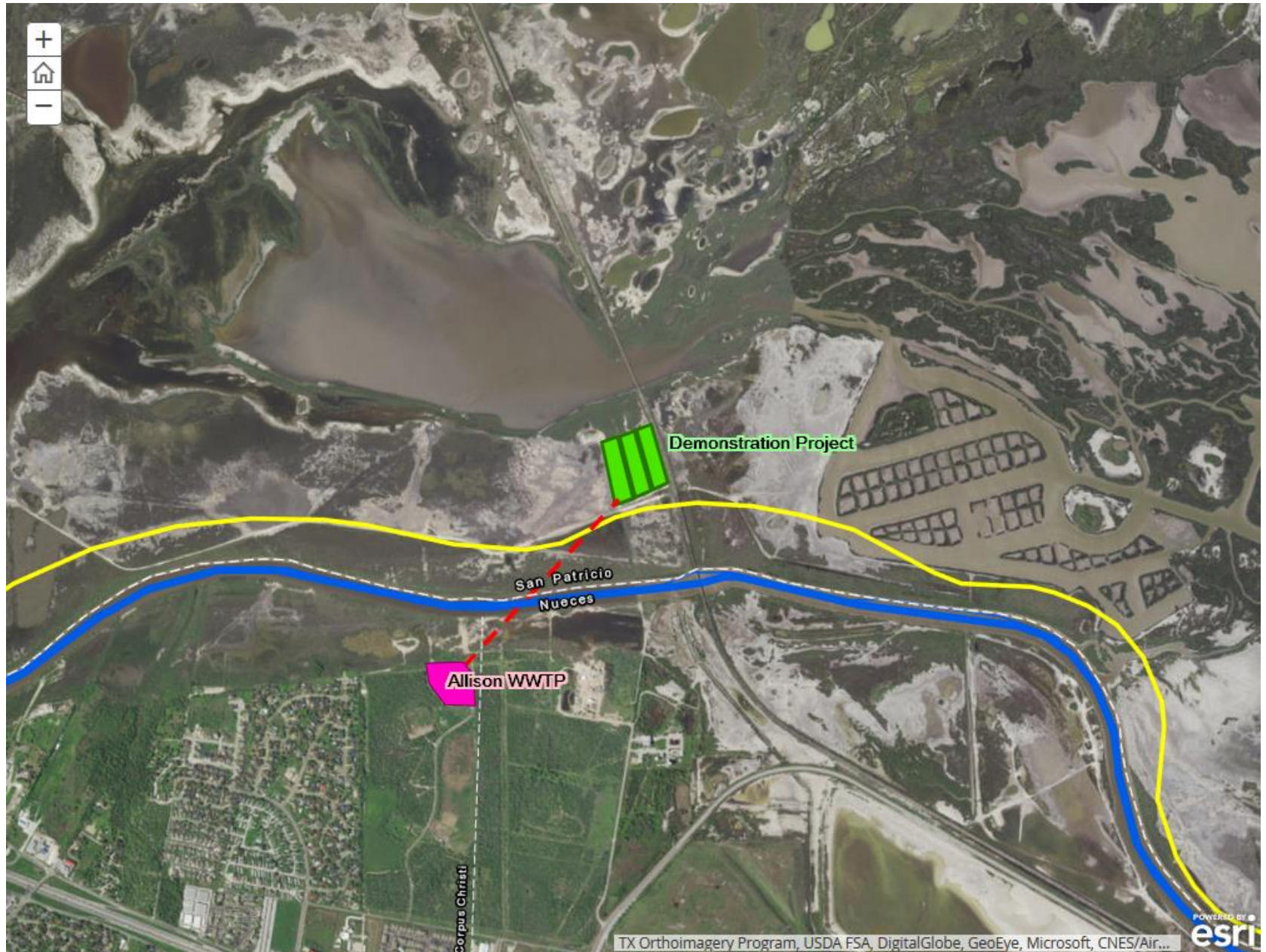


# OPEN PASSAGE UNDER RAILROAD TRACKS



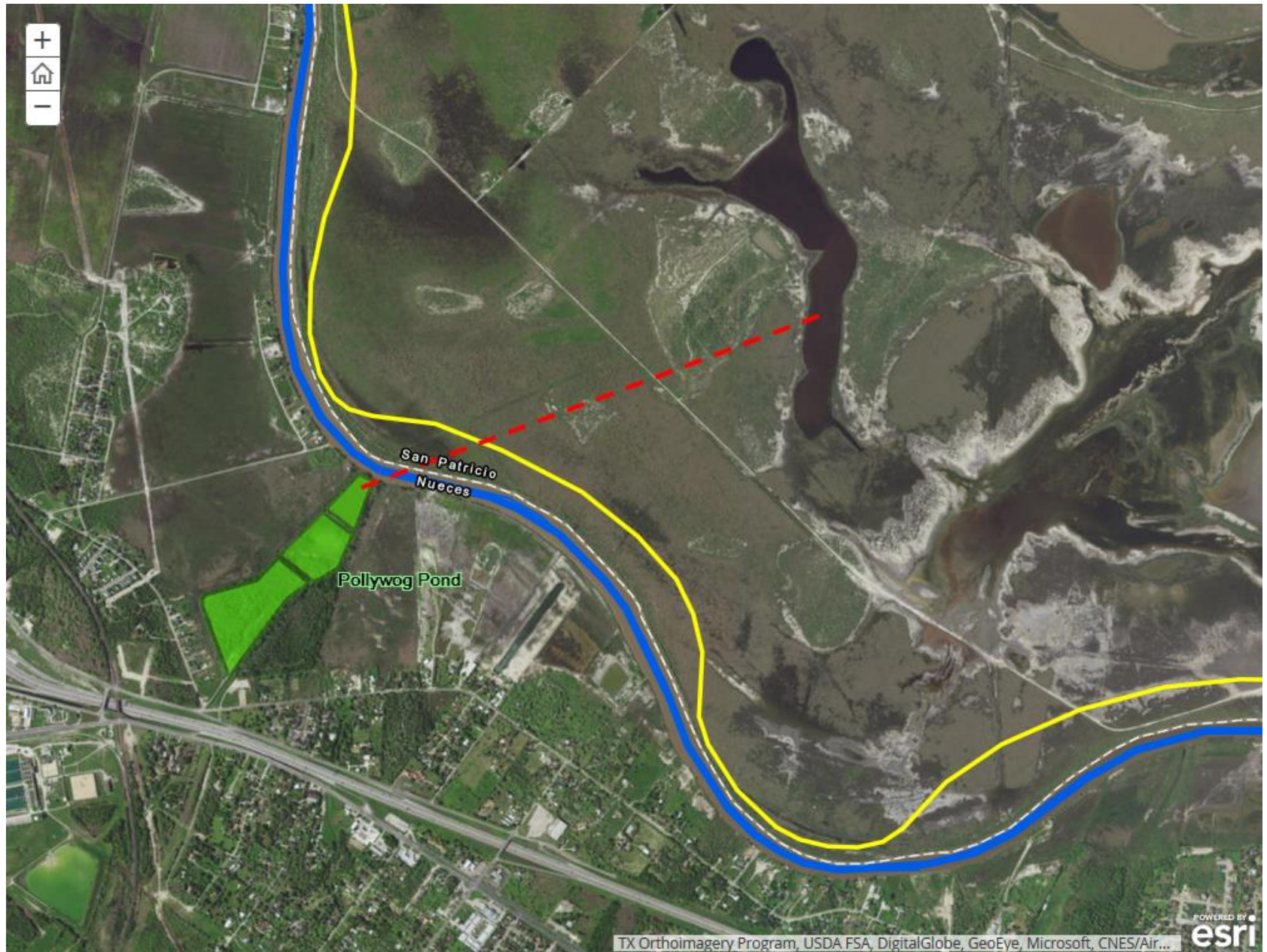


# ALLISON WWTP





# POLLYWOG POND



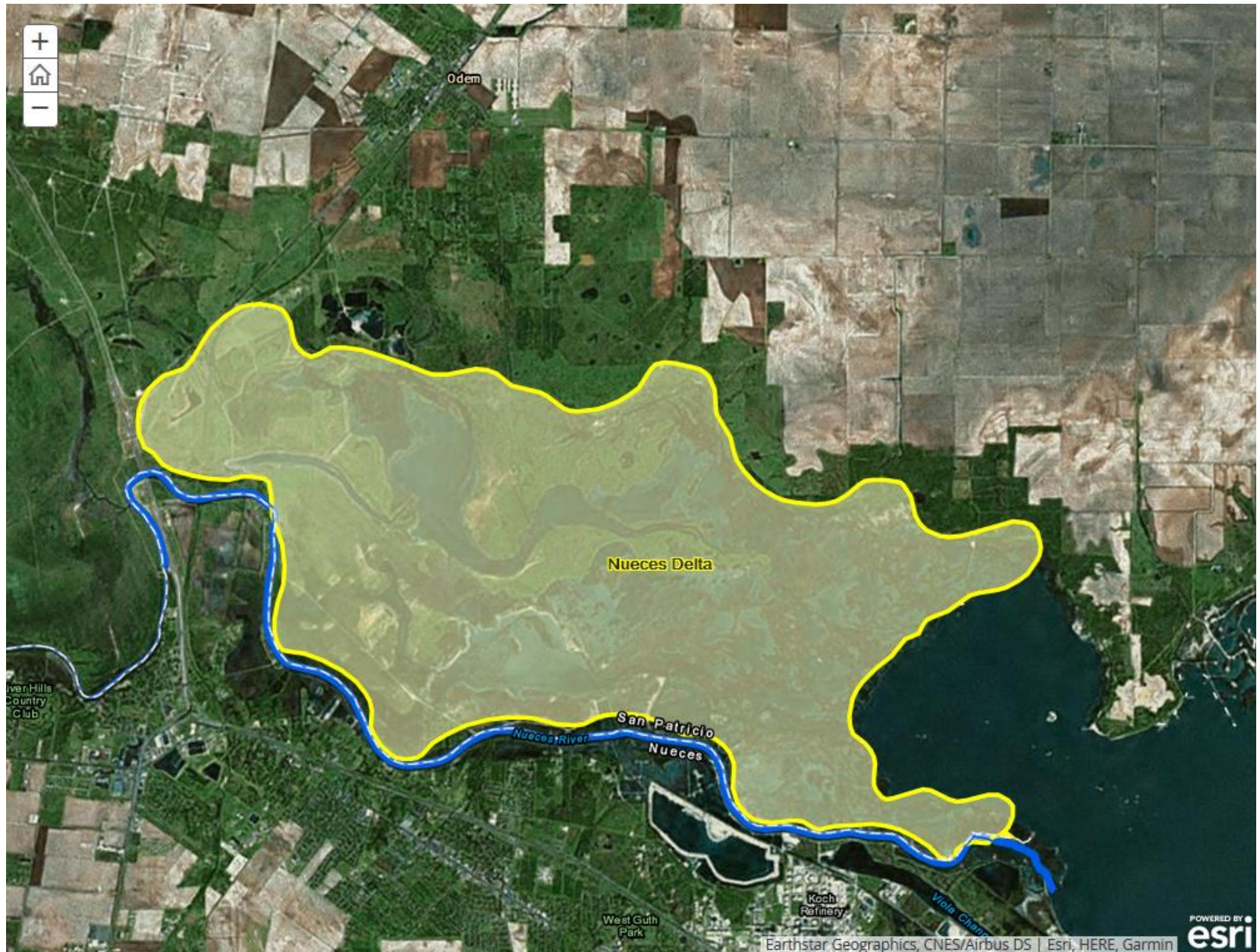


# SAND PITS



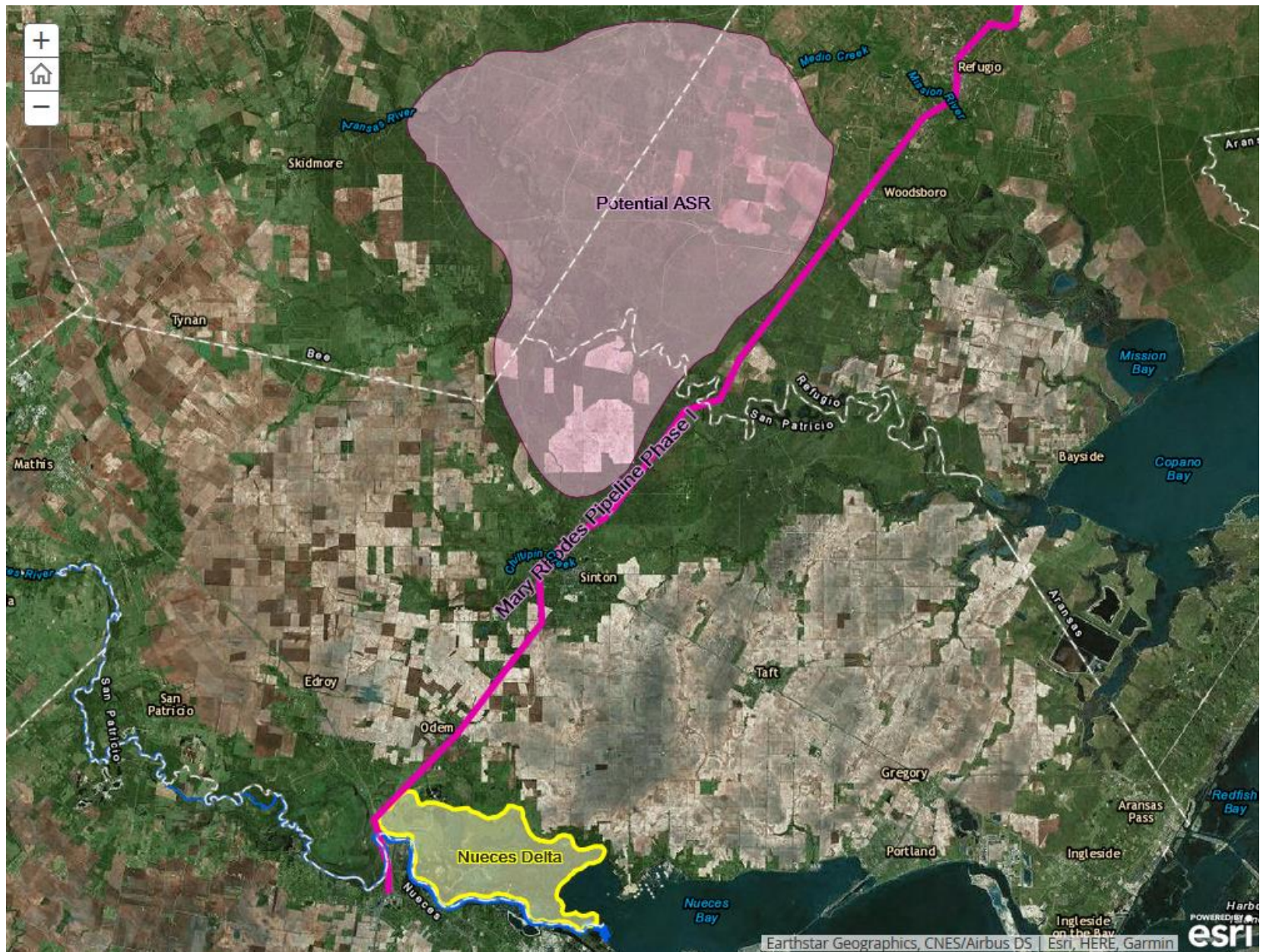


# INSTALL DEEP WATER WELLS IN NUECES DELTA

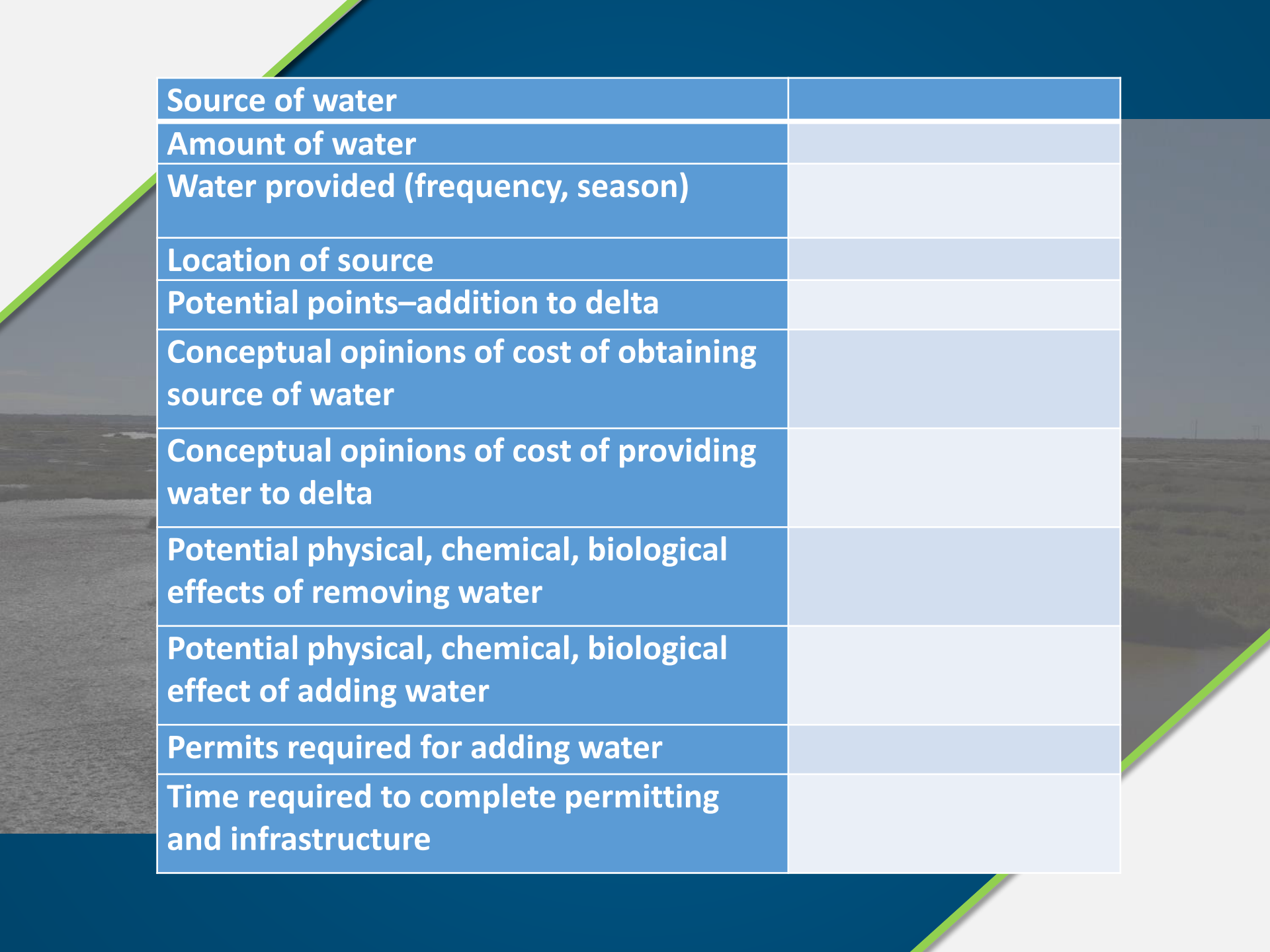




# AQUIFER STORAGE RECOVERY (ASR)







Source of water	
Amount of water	
Water provided (frequency, season)	
Location of source	
Potential points—addition to delta	
Conceptual opinions of cost of obtaining source of water	
Conceptual opinions of cost of providing water to delta	
Potential physical, chemical, biological effects of removing water	
Potential physical, chemical, biological effect of adding water	
Permits required for adding water	
Time required to complete permitting and infrastructure	



**GOAL**

**TEAM**

**INTERVIEWS**

**ALTERNATIVES**



An aerial photograph of a river delta, likely the Nueces River delta, showing a complex network of water channels and marshland. The water is a light brownish-grey, and the surrounding land is covered in green vegetation. The image is framed by a dark blue border with a green diagonal line running from the top left to the bottom right.

**ALTERNATIVES-OUTSIDE AGREED ORDER**

**DIVERSIONS-NUECES RIVER TIDAL/BAY**

**HONDO CREEK REALIGNMENT**

**DEEP WELLS IN DELTA**

**SORENSEN'S SAND PITS**

**NUECES RIVER TIDAL DAM**

An aerial photograph of a river delta, likely the Nueces River delta, showing a complex network of water channels and marshland. The water is a light brownish-grey, and the surrounding land is covered in green vegetation. The sky is a pale blue-grey. The image is framed by a dark blue border at the top and bottom, with a green diagonal line separating the blue sections.

**ALTERNATIVES-OUTSIDE AGREED ORDER**

**DIVERSIONS-NUECES RIVER TIDAL/BAY**

**HONDO CREEK REALIGNMENT**

**DEEP WELLS IN DELTA**

**SORENSEN'S SAND PITS**

**NUECES RIVER TIDAL DAM**



1

# TWDB/NEAC NEEDS

The background of the slide is an aerial photograph of a river delta, likely the Colorado River Delta, showing a network of water channels and surrounding land. A semi-transparent blue rectangular overlay covers the central portion of the image, providing a background for the title text. The slide is framed by dark blue geometric shapes in the corners and a green diagonal line separating the top-left white area from the rest of the slide.